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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,807	09/24/2003	James L. Recker	14289	5445

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EXAMINER

ROSENBERG, LAURA B

ART UNIT

PAPER NUMBER

3616

DATE MAILED: 07/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/669,807	Applicant(s) RECKER ET AL.	
	Examiner Laura B. Rosenberg	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/24/03</u> . | 6) <input type="checkbox"/> Other: ____. |

A

DETAILED ACTION

Claim Objections

1. Claim 32 is objected to because of the following informalities: the phrase "is designed to interact" is in the claim twice. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4, 18, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 4, 18, and 34 recite the limitation "the deploying airbag" in line 2. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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5. Claims 1-3, 5, 8-17, 19, 20, 23-33, and 35-38 are rejected under 35

U.S.C. 102(e) as being anticipated by Volkmann et al. (6,464,251). Volkmann et al.

disclose an inflatable curtain (#4) comprising:

- First panel (for example, upper panel when folded) having a first pleat (any of the folds in the curtain could be a "first pleat")
- When the curtain is inflated with inflation gas (as seen in figure 4), the first pleat opens into a first bulge (for example, at #14 or to the left of the hose #8) prior to the curtain being completely filled with inflation gas (best seen in figure 4), the first bulge changing the deployment trajectory of the curtain (column 2, line 64-column 4)
- Second panel (for example, lower panel when folded) attached to the first panel
- First bulge designed to interact with a portion of a vehicle interior (for example, side window; column 3)
- First pleat formed by folding the first panel (best seen in figures 1-3)
- Second pleat (any of the folds in the curtain could be a "second pleat") added to the second panel
- When the inflatable curtain inflates, the second pleat opens into a second bulge (for example, at #14 or to the left of the hose #8) prior to the curtain being completely filled with inflation gas (best seen in figure 4)
- Second bulge changes the deployment trajectory of the curtain (column 2, line 64-column 4)
- Second pleat formed by folding the second panel (best seen in figures 1-3)

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- First and second pleats span the length of, which includes a portion of, the first and second panels, respectively (zigzag folding occurs across the entire length of the curtain)
- Second bulge designed to interact with a portion of a vehicle interior (for example, side window; column 3)
- First pleat and second pleat open downwards or upwards (depending upon which fold lines are being considered as the "pleats") when the inflatable curtain is installed onto a vehicle interior (best seen in figures 1-3)
- First pleat is aligned with or offset from the second pleat (depending upon which fold lines are being considered as the "pleats")

6. Claims 1-5, 8-20, and 23-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Sunabashiri (2004/0164530). Sunabashiri discloses an inflatable curtain (#1) comprising:

- First panel (for example, panel including #A) having a first pleat (for example, at #P2 or at folded portion between #P1 and #P2)
- When the curtain is inflated with inflation gas (#G), the first pleat opens into a first bulge (#A) prior to the curtain being completely filled with inflation gas, the first bulge changing the deployment trajectory of the curtain (best seen in figure 5; paragraphs 0029-0038)
- Second panel (for example, panel including #B) attached to the first panel (best seen in figures 3, 5)

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- First bulge designed to interact with a portion of a vehicle interior (for example, headliner #6)
- First bulge designed such that the deploying airbag will clear a trim panel (for example, headliner #6) on a vehicle interior (best seen in figure 5)
- First pleat formed by folding the first panel (best seen in figure 3)
- Second pleat (for example, at #P3 or at folded portion between #P2 and #P3) added to the second panel
- When the inflatable curtain inflates, the second pleat opens into a second bulge (#B) prior to the curtain being completely filled with inflation gas (best seen in figure 5)
- Second bulge changes the deployment trajectory of the curtain (best seen in figure 5; paragraphs 0029-0038)
- Second pleat formed by folding the second panel (best seen in figure 3)
- First and second pleats span the length of, which includes a portion of, the first and second panels, respectively (folding occurs across the entire length of the curtain)
- Second bulge designed to interact with a portion of a vehicle interior (for example, roof rail #5 as seen in figure 5)
- First pleat and second pleat open downwards or upwards (depending upon which fold lines are being considered as the "pleats") when the inflatable curtain is installed onto a vehicle interior (best seen in figure 3)
- First pleat is aligned with or offset from the second pleat (depending upon which fold lines are being considered as the "pleats")

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7. Claims 1-6, 10-21, and 25-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakanishi (6,736,422). Nakanishi discloses an inflatable curtain (#1) comprising:

- First panel (for example, #3) having a first pleat (many pleats throughout #3 as seen in figures 4a, 6a, 8a)
- When the curtain is inflated with inflation gas (via inlet #5), the first pleat opens into a first bulge (for example, figures 4b, 6b, 8b) prior to the curtain being completely filled with inflation gas, the first bulge changing the deployment trajectory of the curtain (best seen in figures 4, 6, 8)
- Second panel (for example, #2) attached to the first panel via sewing (column 5, lines 4-7)
- First bulge designed to interact with a portion of a vehicle interior (for example, interacts with lateral side as seen in figures 4, 6, 8)
- First bulge designed such that the deploying airbag will clear a trim panel (for example, lateral side) on a vehicle interior (column 6)
- First pleat formed by folding the first panel (best seen in figures 4a, 6a, 8a)
- Second pleat (many pleats throughout #2 as seen in figures 4a, 6a, 8a) added to the second panel
- When the inflatable curtain inflates, the second pleat opens into a second bulge (best seen in figures 4c, 6c, 8c) prior to the curtain being completely filled with inflation gas

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- Second bulge changes the deployment trajectory of the curtain (best seen in figures 4, 6, 8)
- Second pleat formed by folding the second panel (best seen in figures 4a, 6a, 8a)
- First and second pleats span the length of, which includes a portion of, the first and second panels, respectively (folding occurs across the entire length of the curtain)
- Second bulge designed to interact with a portion of a vehicle interior (for example, interacts with lateral side as seen in figures 4, 6, 8)
- First pleat is aligned with or offset from the second pleat (depending upon which fold lines are being considered as the "pleats")

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 7 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakanishi (6,736,422) in view of Bakhsh et al. (6,851,707). Nakanishi does not disclose the first and second panels attached via adhesive bonding. Bakhsh et al. teach an inflatable curtain (#14) comprising first and second panels (#40, 42) attached to each other via weaving, stitching, dielectric sealing, ultrasonic bonding, heat sealing, or adhesives (column 3, line 63-column 4, line 3). It would have been obvious to one skilled in the art at the time that the invention was made to modify the attachment of the

first and second panels of Nakanishi such that it comprised adhesive bonding as claimed in view of the teachings of Bakhsh et al. so as to most effectively seal the panels together to prevent loss of inflation gas as the curtain is inflating, the different methods of attachment taught by Bakhsh et al. being old and well known in the art.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fischer, Eckert et al., Hawthorn et al., Bakhsh et al. ('0074, '6841) each disclose an inflatable airbag with fold lines, or pleats, for specific directional inflation into different positions with respect to the vehicle occupant.

Asano et al., Kawasaki et al., Yokoyama et al., Ogawa et al. disclose an inflatable curtain with fold lines, or pleats, creating bulges that enable the curtain to be deployed without getting caught on interior components and with optimal protection of a vehicle occupant.

Hoeft et al. disclose an inflatable curtain with fold lines, or pleats, including two panels that can be attached via sewing or adhesive bonding.


Daines et al. disclose an inflatable curtain with pleats.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B. Rosenberg whose telephone number is (571) 272-6674. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Laura B Rosenberg
Patent Examiner
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